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OW Management Report – Charleston, WV Chemical Spill – 1/14/2014

(The main sources for this information is an OEM Spot Report issued at 1300 hr on 1/14/14 and the FEMA Daily Operations Report dated 1/14/14, New information since the latest OW Management Report is highlighted.)

(Note that, barring dramatic developments, there will be no OW management report on Wednesday 1/15. The next report will be on Thursday 1/16.)

Situation:

On January 10, the President approved an Emergency Declaration for the State of West Virginia after a chemical leaked through a secondary containment area at a Freedom Industries chemical plant and into the Elk River in Charleston, WV (pop. 51,018) (NRC#1070627). The chemical (MCHM) (4-methylcyclohexanemethanol) is a flammable solvent used in the coal preparation process and is an irritant to eyes, respiratory system, and skin. FEMA reports that up to 7,500 gallons of chemical leaked in the Elk River near the Kanawha Valley Water Treatment Plant. Based on river flow dilution, officials calculate the chemical concentration in the water to be well below the CDC declared safe level. The Kanawha Valley Water Treatment Plant detected the chemical even after the increased carbon treatment effort was put in place. Freedom Industries is working to clean up the spill at the facility and in the river.

Drinking Water Monitoring and System Flushing:

As of this morning customers in the four zones of the water distribution system in the immediate Charleston area and two additional zones just beyond were asked to flush their premise plumbing according to explicit instructions posted on the WVAVC website:

<http://www.amwater.com/wvaw/about-us/news.html>.

Sampling continues, moving outward into the distribution system, with samples being sent to multiple labs. At this time, nine GC/MS units are being employed to process the hundreds of samples. As the results from the zones show concentrations of MCHM less than 1 ppm, these zones are “cleared” for unrestricted use by customers (after customers follow instructions for flushing their premise plumbing).

River Impacts:

ORSANCO (Ohio River Sanitation Commission) has been monitoring water concentrations to determine persistence of the MCHM plume in the Elk-Kanawha-Ohio drainage. There is not yet access to hard data, although it is understood that concentrations below the confluence of the Kanawha and Ohio are all < 0.5 ppm. ORSANCO has also used river modeling to forecast the arrival time of any residual plume at locations downstream: <http://www.orsanco.org/february-2013-technical-and-commission-meetings/347-new-how-will-the-elk-river-spill-affect-the-cincinnati-area> .

The facility is continuing a river sampling program with analytical results expected by tomorrow. There are no reports of any fish kill or significant issues with aquatic life in the Elk River.

The US Fish and Wildlife Service has sought information from WV American on their discharges from flushing, presumably because of Threatened and Endangered species concerns. It is understood from WV DHHR that WVAVC has dechlorinated any water flushed out of their system.

Health Effects:

Senator Rockefeller has made a request to both EPA and ATSDR/CDC to conduct a joint study of the long-term public health effects of MCHM.

EPA Actions:

Two Region 3 OSCs reported that throughout the night, the facility's contractor continued to pump water from the containment area into trucks. The contractor will continue this operation as long as the rain and run-off water continues to collect in the containment area. The contractor will extend the liner in the trench area at the base of the facility, located adjacent to the river. Water will also continue to be pumped out of this area into tanker trucks.

FEMA Activities:

- NRCC is at Level III (Day Shift) with ESF-7; NWC at Enhanced Watch (Night Shift)
- Region III RRCC is at Level III; all ESFs were released, but remain on standby
- IOF established in Charleston, WV, with FCO, IMAT & LNO on scene
- All State requirements for food and water have been met; all inbound shipments have stopped

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